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<div>EXAMINER FISHER, MICHAEL J</div>				
<div>ART UNIT 3689</div>		<div>PAPER NUMBER</div>		
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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/051,876  
Filing Date: January 17, 2002  
Appellant(s): WIPPERSTEG, HANS-HERMANN

\_\_\_\_\_  
Robert C. Haldiman (Reg # 45,437)  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 1/21/10 appealing from the Office action  
mailed 1/21/10.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

53-74

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

**(8) Evidence Relied Upon**

5,999,908	Abelow	12-1999
5,442,553	Parrillo	8-1995

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 53-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PAT 5,442,553 to Parrillo (Parrillo) in view of US PAT 5,999,908 to Abelow .

As to claim 53, Parrillo discloses a system for repair management of vehicles (title), a network with interfaces for communication (fig 1), processors with memories (computers, abstract lines 1-5), recording in memories individual data uniquely associated with each machine (col 5, lines 14-16), a first data set comprising a plurality of base repair plans (abstract, lines 4-6), recording in memory a data set

comprising changed in the machines (col 4, lines 57-64) and a repair plan ("work path") is generated based on this information (col 5, lines 14-19).

Parrillo does not, however, teach storing pre-service life design changes. Parrillo, as discussed, does teach using the system for agricultural machinery or storing pre-service-life design changes.

Parrillo does teach the system as storing maintenance changes to the machine (timing, as discussed above), however, Parrillo does not specifically teach hardware changes to the machines (such as conversion of parts).

Abelow teaches an electronic repair manual that is updated to reflect changes to the machines (col 31, lines 35-39) to be serviced. Further, Abelow teaches this to be done remotely from the machines (col 2, lines 13-20).

It would have been obvious to one of ordinary skill in the art to modify the system as taught by Parrillo with the updated service manuals as taught by Abelow as both teach systems and methods for repair of equipment and updating the information in order to keep the electronic manual up to date on the modifications of the machines to be serviced.

As to claim 54, the data set includes modification history of the machine (col 4, lines 57-60 of Parrillo and further in col 31, lines 35-39 in Abelow).

As to claim 55, the display shows an approval field for response by the user (col 5, lines 40-42, the response would be the customer bringing the vehicle in for repairs).

As to claim 56, the system receives feedback data (col 1, lines 54-56).

As to claim 57, the feedback consists of maintenance status (col 4, lines 40-50).

As to claim 58, there is a variance database (col 5, lines 44-46).

As to claim 59, Parrillo does not specifically mention part performance evaluations. However, Parrillo does teach using the information to correct deficiencies (col 5, lines 44-45), therefore, it would have been obvious to one of ordinary skill in the art to modify the system as taught by Parrillo by saving part performance evaluations as these would aid in correcting deficiencies in deficient parts.

As to claim 60, the remote computer is located in the vehicle (fig 2).

As to claim 61, Parrillo does not specifically mention recording model or year, however, it would have been obvious to one of ordinary skill in the art to record model and year as Parrillo discloses using the information to make subsequent model years less likely to break down (col 5, lines 44-46).

As to claim 62, the data consists of the machine's service history (col 4, lines 57-60).

As to claim 63, the system transmits diagnostic data (title).

As to claim 64, the data includes a list of parts (inherent in that repair information is sent to minimize repair time, col 5, lines 40-44).

As to claim 65, it is inherent that needed resources are provided else the repairs could not be performed.

As to claim 66, Parrillo does not teach a verification element to ensure the repairs are performed. It would have been obvious to one of ordinary skill in the art to include a verification unit to ensure the work that's supposed to be done is done.

As to claim 67, Parrillo does not specifically teach "producing documentation", however, it would have been obvious to one of ordinary skill in the art to have the unit produce documentation and send it to the central computer to ensure the work that's supposed to be done is done.

As to claim 68, the central computer produces an account for repair of the machine with the aid of the repair plan (claim 9).

As to claim 69, Parrillo does not teach a remote, repair vehicle. It would have been obvious to one of ordinary skill in the art to use a remote repair vehicle in case the vehicle is in an area where the network isn't active or if the machine's hardware needs to be repaired instead of just software. .

As to claim 70, Parrillo teaches a diagnostic system in each vehicle (22, fig 2) that sends data to the central computer (31).

As to claim 71, parts replaced according to the plan would have "reached the end of their useful service life".

As to claim 72,74, upgrade data is able to be updated (col 4, lines 57-60).

As to claim 73, Parrillo teaches a repair plan. It is old and well known in the art for repair plans to list which parts have to be removed in order to get to the defective part (for instance, in replacing a heating core the instructions generally include telling how to get to the heater core by removing the console or dash board), therefore, it would have been obvious to one of ordinary skill in the art to include instructions for how to repair the vehicle (dismount parts in order to reach the defective part) as this would give the repairer a repair plan that tells how to repair the vehicle.

**(10) Response to Argument**

As to arguments in relation to communication traveling from a central processor to a remote station computer, the processor in the vehicle is a "remote station computer", thereby meeting the limitations as claimed.

As to arguments that there was no reason to combine or that the art is non-analogous, the examiner disagrees. Both are used to refine repairs of vehicles based on previous services. As repeatedly discussed, Parrillo specifically discloses tracking previous timing problems for future repairs, Abelow is used in order to keep the electronic manual up to date. Both of which are the thrust of the instant invention. The examiner is merely combining two references in the same field to reject the instant invention. The design incentive is to use two inventions in the same field together. Merely changing one aspect of one invention using another would not render the resultant "invention" patentably distinct. As to arguments that the prior art does not teach the generation of a repair plan to aid a human repairman, the examiner disagrees. Both explicitly are used, as repeatedly discussed, to track previous repairs and in order to ascertain what is wrong (i.e. aid a human repairman in his repairing). Parrillo is directed toward data collection, as appellant states. However, Parrillo then uses that collected data to help future repairs. Abelow is merely used for hardware changes instead of merely working on the timing. The examiner believes that working on the timing would render the instant invention obvious without a secondary reference, however, to fully explain the change, the examiner used a secondary reference in the same field and doing the same thing, the Abelow reference disclosed the hardware



changes as per previously amended claims in the instant application. As to arguments that Parrillo and Abelow only teach receiving data, the examiner disagrees. They output the data to repairmen, (as repeatedly pointed out in previous rejections and responses to arguments). As to arguments that the Parrillo reference only receives data from the vehicle, appellant is directed toward col 5, lines 14-19, "As an example, the history of engine timing is received.... reviewed and analyzed. If it appears that the timing has deteriorated.... remote stations sends a message to the vehicle 15 to change the timing..." as can be seen, data transference is two-way. As to arguments that changing the timing is not "prior repair, conversion as claimed.", the examiner most vehemently disagrees. Changing timing is repair as a vehicle with improper timing does not run well, changing the timing is "fixing" the problem, i.e. repair.

As to arguments that the Abelow reference does not teach an electronic repair manual, appellant is directed to the abstract, last 5 lines, "...By making two-way learning and information delivery... third parties can become faster, more efficient and accurate in...supporting what customers want to buy." Supporting is 'keeping in repair'. Just because they do not specifically call this information an "electronic repair manual" does not mean it is not semantically equivalent.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

MF

4/8/10

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